

PATENT COOPERATION TREATY
PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
 (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P34901-P0	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/JP2004/016644	International filing date (<i>day/month/year</i>) 10.11.2004	Priority date (<i>day/month/year</i>) 26.12.2003
International Patent Classification (IPC) or national classification and IPC G05F1/10		
Applicant MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.		

<ol style="list-style-type: none"> 1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of 4 sheets, including this cover sheet. 3. This report is also accompanied by ANNEXES, comprising: <ol style="list-style-type: none"> a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of 28 sheets, as follows: <table border="0" style="width: 100%;"> <tr> <td style="width: 15px;"><input checked="" type="checkbox"/></td> <td style="width: 85%;">sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</td> </tr> <tr> <td><input type="checkbox"/></td> <td>sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</td> </tr> </table> b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions). 	<input checked="" type="checkbox"/>	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).	<input type="checkbox"/>	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
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<input type="checkbox"/>	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.			

<ol style="list-style-type: none"> 4. This report contains indications relating to the following items: 																
<table border="0" style="width: 100%;"> <tr> <td style="width: 15px;"><input checked="" type="checkbox"/></td> <td style="width: 85%;">Box No. I Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II Priority</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VII Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VIII Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I Basis of the report	<input type="checkbox"/>	Box No. II Priority	<input type="checkbox"/>	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI Certain documents cited	<input type="checkbox"/>	Box No. VII Certain defects in the international application	<input type="checkbox"/>	Box No. VIII Certain observations on the international application
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Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/016644

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

This report is based on translations from the original language into the following _____, which is the language of a translation furnished for the purposes of:

 - international search (Rule 12.3 and 23.1(b))
 - publication of the international application (Rule 12.4)
 - international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

the international application as originally filed/furnished
 the description:
 pages 1, 2 _____ as originally filed/furnished
 pages* 3, 4, 4/1, 5, 5/1, 6, 7, 7/1, received by this Authority on 29.08.2005
 pages* 8-10, 10/1 _____
 pages* 11, 11/1, 12, 13, 13/1, 14, 15, received by this Authority on 29.08.2005
15/1 _____

the claims:
 nos. 4, 6, 10, 12 _____ as originally filed/furnished
 nos.* _____ as amended (together with any statement) under Article 19
 nos.* 1, 2, 3, 5, 7, 8, 9, 1, 11 _____ received by this Authority on 29.07.2005
 nos.* _____ received by this Authority on _____

the drawings:
 sheets Fig. 1-12 _____ as originally filed/furnished
 sheets* _____ received by this Authority on _____
 sheets* _____ received by this Authority on _____

a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. The amendments have resulted in the cancellation of:

the description, pages _____
 the claims, nos. _____
 the drawings, sheets/figs _____
 the sequence listing (*specify*): _____
 any table(s) related to sequence listing (*specify*): _____
4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

the description, pages _____
 the claims, nos. _____
 the drawings, sheets/figs _____
 the sequence listing (*specify*): _____
 any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/016644

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1–12	YES
	Claims		NO
Inventive step (IS)	Claims	1–12	YES
	Claims		NO
Industrial applicability (IA)	Claims	1–12	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

Documents cited in the written opinion of the international search authority:

Document 1: JP 10-105258 A

Document 2: JP 2003-185692 A

Document 3: JP 2002-251301 A

Document 4: JP 8-79901 A

Fig. 1 of document 1, which is most closely related to the invention of this application, sets forth a reference voltage generating circuit, wherein a capacitor C and a resistor R12 are connected to the same power supply voltage VSS, the other end of the resistor R12 is connected to one input node of a comparator 40, and the other end of the capacitor C is connected to the other input node of the comparator 4.

However, the invention set forth in claim 1 is a semiconductor device which activates an output signal indicating the comparison results when a voltage difference is generated between the reference voltage inputted to the comparator and the output at the other end of the capacitive element connected to the power supply voltage.

That is to say, the comparator of the invention set

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITYInternational application No.
PCT/JP2004/016644**Box No. V** **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

forth in claim 1 of this application and the comparator set forth in document 1 have different effects of operation, and the form of connection to the power supply voltage and capacitor are different.

Documents 2 to 4 neither disclose nor suggest the configuration of the invention set forth in claim 1.

Therefore the invention set forth in claim 1 is novel and involves an inventive step.

In addition, the invention set forth in claim 7 is provided with the configuration of the invention set forth in claim 1 of this application, and delimits a second comparator, and is therefore novel and involves an inventive step.

The invention set forth in claims 2 to 6 refers back to and further delimits claim 1, and the invention set forth in claims 8 to 12 refers back to and further delimits claim 7, and similarly to claims 1 and 7, are novel and involve an inventive step.

The invention set forth in claims 1 to 12 is clearly industrially applicable.